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Monoclonal Antibody to CD25 / IL2RA - FITC

Alternate names: IL-2 receptor alpha subunit, IL-2-RA, IL2-RA, Interleukin-2 receptor alpha chain, TAC antigen, p55

Catalog No.: AM08036FC-N

Quantity: 0.5 mg

Concentration: 0.5 mg/ml

Background: The IL-2 receptor (IL-2R) exists in three alternative forms made up from the individual components of CD25, CD122, and CD132. CD25 represents the low affinity alpha chain of the IL-2R, a type I transmembrane glycoprotein containing two CCP domains. It is rich in O-linked carbohydrates and has a short cytoplasmic tail. (Ref.14) CD25 is expressed on activated T cells, B cells, NK cells and monocytes of all mouse strains tested. (Ref.2,3,15) Expression of CD25 on activated T lymphocytes is transitory and endogenously regulated. (Ref.4) CD25 is expressed on precursor B cells in bone marrow. Its expression is initiated by functional rearrangement and expression of IgM heavy chain genes and is down-regulated when immature B cells mature and express IgD. (Ref.5) It is expressed at a higher level on CD4+CD8+ thymocytes. (Ref.5,6) It is also expressed on cultured epidermal Langerhans cells. (Ref.7) The biochemical features of murine CD25 have been characterized in detail. (Ref.8-10)

Uniprot ID: P01590

NCBI: NP_032393.3

GeneID: 16184

Host / Isotype: Rat / IgG2b

Clone: 3C7

Format: **State:** Liquid purified Ig fraction.
Buffer System: PBS containing 0.09% Sodium Azide as preservative.
Label: FITC – Fluorescein Isothiocyanate Isomer 1

Applications: **Flow Cytometry:** ‹ / = 3 µg/10e6 cells.
Identification and enumeration of CD25+ cells. (Ref.1-4)
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody is specific to Low affinity alpha chain IL-2 Receptor (IL-2Ra), Mr 55 kDa.
The 3C7 monoclonal antibody reacts with an epitope of CD25 which is distinct from that recognized by clone 7D4. (Ref.2,11,12)
Clone 3C7, used in combination with 7D4 in culture, results in higher levels of inhibition of proliferation driven by IL-2 and generation of alloreactive CTL than either of these monoclonal antibodies alone. (Ref.2,13)
Species: Mouse.
Other species not tested.

Storage:

Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
This product is photosensitive and should be protected from light.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

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